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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,389

08/31/2006

Tadashi Minotani

44471/334149

1889

23370 7590 12/08/2008

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KILPATRICK STOCKTON, LLP
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ATLANTA, GA 30309

EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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DETAILED ACTION

Information Disclosure Statement

1. The references listed in the information disclosure statements submitted on 8/31/06 has been considered by the examiner (see attached PTO-1449).

Drawings

2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims **18-19, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Applicant's admitted prior art** (Background Art section and Figures 1-5), hereafter **AAPA**.

Regarding claim **18**, **AAPA** discloses an electric field communication transceiver that carries out data communication via an electric field induced in an electric field transmission medium, the transceiver comprising:

a resonance circuit (Fig. 3) that is provided with an inductor (687) for causing resonance in a transmission signal for the communication and a variable capacitance diode (671) of which electrostatic capacitance varies in accordance with a voltage (from control signal 611) applied thereto, and a resistor (691) that generates a voltage in accordance with a direct current obtained by rectifying with the variable capacitance

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diode the transmission signal inputted to the resonance circuit and applies the voltage across the anode and the cathode of the variable capacitance diode (see Figs. 1, 3 and paragraphs [0003, 0004,0009,0010], wherein one skilled in the art would recognize that control signal 611 for adjustment of resonance frequency would obviously perform claimed limitations.

Regarding claim **19**, **AAPA** would teach an electric field communication transceiver as recited in claim 18, wherein the resonance circuit causes resonance with parasitic capacitance between a ground of the electric field communication transceiver and an earth ground and parasitic capacitance between the electric field transmission medium and the earth ground (see Fig. 1 regarding resonance circuit 106 and parasitic capacitances 107, 109, 110).

Regarding claim **22**, **AAPA** would teach an electric field communication transceiver as recited in claim 18, wherein the inductor arranges at one terminal or both terminals thereof a capacitor for blocking an input of a direct current thereto (see Fig. 3 regarding capacitor 690 and inductor 687).

5. Claims **20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable by **AAPA** in view of **Wantanabe** (US **6,477,360**).

Regarding claims **20-21**, **AAPA** fails to teach the resonance circuit wherein the inductor is connected in series with the variable capacitance diode. However, it is noted that utilizing a resonance circuit wherein an inductor is connected either in parallel or in series with a variable capacitance diode is well known in the art as disclosed by

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Wantanabe (see Figs. 5-7, 11-13). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify AAPA for replacing a parallel connection with a series connection as claimed, as an alternative of obvious design choices.

Allowable Subject Matter

6. Claims 1-17, 27-37 are allowed.
7. Claims 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the attached PTO-892.

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

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(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Nay Maung (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

Dec 5, 2008